

Amendments to the Claims:

The following listing of claims will replace all previous listings and versions of the claims:

1. (Currently Amended): An electrical power system for supplying continuous power to a load, comprising:

a static converter continuously converting input power to a fixed frequency AC output power;

an electrical power storage subsystem;

an electrical power generator independent from a utility power system; and

a control system operably connected ~~coupled with~~ to the static converter, the electrical power storage subsystem, and the electrical power generator, such that the control system selectively connects the static converter, the electrical power storage subsystem, or the electrical power generator independently or in combination to the electrical load, thereby allowing continuous backup power is provided to be provided to the load by both the electrical power storage subsystem and the electrical power generator simultaneously and cooperatively.

2. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system provides a plurality of modes of operation including at least a static compensator (STATCOM) operational mode and an uninterruptible power supply (UPS) operational mode.

3. (Canceled)

4. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system further provides a multiplicity of generator connection modes, including at least a dc-connected generator mode and an ac-connected generator mode.

5. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system comprises a feedback loop.

6. (Previously Presented): The electrical power system as claimed in claim 1, wherein:

the control system comprises:

a current control system coupled with the electrical power storage subsystem and the electrical power generator; and

a voltage control system coupled with at least the electrical power storage subsystem.

7. (Previously Presented): The electrical power system as claimed in claim 6, wherein:

the current control system includes a current controller coupled with a pulse pattern generation unit; and

the pulse pattern generation unit couples with the electrical power storage subsystem and is configured to supply control signals to the electrical power storage subsystem.

8. (Previously Presented): The electrical power system as claimed in claim 7, wherein:

the voltage control system includes a voltage source converter (VSC) voltage controller coupled with the pulse pattern generation unit; and

the pulse pattern generation unit couples with the electrical power storage subsystem and is configured to supply control signals to the electrical power storage subsystem.

9. (Previously Presented): The electrical power system as claimed in claim 8, wherein:

the energy storage system includes a voltage source converter (VSC) coupled with an energy storage unit, wherein the energy storage unit is configured to store electrical energy, and the VSC is configured to draw energy from the energy storage unit and supply electrical energy to the energy storage unit.

10. (Previously Presented): The electrical power system as claimed in claim 6, wherein:

the control system further includes a detection and mode selection unit coupled with the current control and the voltage control, and configured to determine the mode of operation of the apparatus.

11. (Previously Presented): The electrical power system as claimed in claim 10, further comprising:

a solid state breaker (SSB) coupled with the detection and mode selection unit and with a grid and configured to decouple a load from the grid; and

the detection and mode selection unit is configured to signal the SSB to open and close.

12. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises a battery.

13. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises a flywheel.

14. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises superconducting magnets (SMES).

15. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises an electrochemical capacitor.

16. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises a compressed air energy storage system (CAES).

17. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system includes at least one storage control module specifically configured for controlling the operation of the electrical power storage subsystem.

18. (Canceled)

19. (Previously Presented): The electrical power system as claimed in claim 17, wherein the storage control module is chosen from the group comprising: a software configuration, a hardware configuration, and a combination of a software and a hardware configuration.

20. (Previously Presented): The electrical power system as claimed in claim 2, wherein the control system includes at least one electrical power generator control module specifically configured for controlling the operation of the electrical power generator.

21. (Previously Presented): The electrical power system as claimed in claim 20, wherein the electrical power generator control module is interchangeable with a second electrical power generator control module that is specifically configured for controlling the operation of a second electrical power generator.

22. (Currently Amended): An apparatus for providing electrical power, comprising:

a static compensator (STATCOM) adapted to be coupled to an electrical grid;

an uninterruptible power supply (UPS) electrical power storage subsystem coupled to the STATCOM;

an electrical power generator generation module independent of the electrical grid;
and

a multimode control system coupled operably connected to with the STATCOM, the UPS electrical power storage subsystem, and the electrical power generator generation module, wherein the multimode control system is configured to:

(1) controls control the operation of each of the STATCOM, the UPS electrical power storage subsystem, and the electrical power generator generation module[.];

(2) selectively connect the such that the STATCOM, the UPS electrical power storage subsystem, and or the electrical power generator generation module independently or in combination to an electrical load, such that AC power is continuously provided to the electrical load at all times simultaneously and cooperatively provide reactive power and real electrical power in any combination before, during, or after a disturbance or outage on an electrical grid.

23. (Canceled)

24. (Currently Amended): The apparatus as claimed in claim 22, wherein:

the control system includes at least:

a current control system coupled with the STATCOM, the UPS electrical power storage subsystem, and the ~~generator~~ electrical power generation module to provide control for the STATCOM, the UPS electrical power storage subsystem, and the ~~generator~~ electrical power generation module; and

a voltage control system coupled with at least the UPS electrical power storage subsystem to provide control for the UPS electrical power storage subsystem.

25. (Currently Amended): The apparatus as claimed in claim 22, wherein:

the control system includes at least:

a current control system coupled with the STATCOM and the UPS electrical power storage subsystem to provide control for the STATCOM and the UPS electrical power storage subsystem; and

a voltage control system coupled with at least the UPS electrical power storage subsystem to provide control for the UPS electrical power storage subsystem.

26. (Previously Presented): The apparatus as claimed in claim 25, wherein:

the control system includes: a detection and mode selection unit coupled with the current control system and the voltage control system to signal the current control system and the voltage control system to activate and deactivate the current control system and the voltage control system.

27. (Previously Presented): The apparatus as claimed in claim 26, wherein the STATCOM includes at least a voltage source converter (VSC) coupled with an energy storage unit, wherein the VSC provides at least reactive power injection or absorption.

28. (Canceled)

29. (Previously Presented): The apparatus as claimed in claim 27, wherein the energy storage unit is chosen from the group comprising: a battery, a flywheel, superconducting magnets (SMES), an electrochemical capacitor, and combinations thereof.